

Strength of expertise

ENVIRONMENTAL DATA SHEET



VALIDATED ECO-DECLARATION

PRODUCT SPECIFICATIONS

References

Soundproof Steel Door 16 GA satin finish 36" x 84" x $1^{3/4"}$

Final manufacturing locations

2150 Leon Harmel Street, Quebec, Quebec G1N 4L2 CANADA 7800 Bombardier Street, Anjou, Quebec H1J 2G3 CANADA

Composition

Carbon steel 16 GA, anti-vibration liquid, gypsum, carbon steel 18 GA vertical stiffeners, Sonopan panel, compressed fiberglass, hinge reinforcements, adhesive, lock reinforcements, paint (for touch-ups).

ATTRIBUTES

Recycled content

Pre-consumer and post-consumer contents vary according to the product (see page 2).

Sourcing of raw materials

The sourcing of raw materials is documented between 44.3% and 80.1% based on the weight of the final manufactured product.

FSC® Rapidly renewable materials Biobased materials

ENVIRONMENTAL IMPACTS

Life Cycle Assessment

Product's carbon footprint

Environmental Product Declaration ISO 14025:2006

INGREDIENTS AND EMISSIONS

Declaration of	1,000 mmm
chemical ingredients	1,000 ppm

Type of declarationHPD® version 2.1Health Product Declaration®

Emission test	-
VOC Paint (for touch-ups) Adhesive Anti-vibration liquid (All products are applied at the plant)	83 g/L 127 g/L 37 g/L
Formaldehyde	-

Other

Métalec manufactures steel doors and frames for commercial, industrial and institutional projects. Models offered include fire-rated steel doors, security doors, soundproof doors, stainless steel doors, insulated doors and steel frames.

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Quebec Division: 2150 Leon Harmel Street, Quebec, Quebec G1N 4L2 CANADA Montreal Division: 7800 Bombardier Street, Anjou, Quebec H1J 2G3 CANADA www.metalec.com

SOUNDPROOF STC STEEL DOOR

Over the years, Métalec Steel Doors and Frames has forged a solid reputation in the field of steel door manufacturing for commercial, industrial and institutional projects.

Métalec's Soundproof Steel Frames and Doors are necessary in commercial buildings to ensure confidentiality and to control noise intrusion in auditoriums, offices, hospitals, schools and apartments.

Models:

- STC-42
- STC-44

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TECHNICAL PERFORMANCES

Performance tests

Compliance with steel standards: ASTM A 653 / A 653M

Compliance with acoustic standards: ASTM E 336, ASTM E 413, ASTM C 423.

Fire resistance testing: CSDMA, NAAMM, CAN/ULC-S104-M80, UL10 (b), NFPA252, NFPA80, ASTM E 152.

MANUFACTURER'S ENVIRONMENTAL MANAGEMENT

ISO 14001 certification

Extended Producer Responsibility (Take Back Program)

Corporate Sustainability Report (CSR: GRI, ISO 26000, BNQ 21000 or other)

CERTIFICATIONS AND CONFORMITY REPORTS

MasterFormat: **08 11 00** Validated Eco-Declaration: **EDV17-1081-05** Original issue date: **02/2019** Period of validity: **02/2019** to **11/2019**



SOUNDPROOF STC STEEL DOOR





Dimensions

- Width: 36"
- Height: 84"
- Thickness: 1^{3/4}"
- Other dimensions available upon request.

Acoustic characteristics

The acoustic system consists of the following elements:

- Magnetic sound cutter
- Compressible sound cutter
- Falling sill
- Aluminum threshold

ATTRIBUTES

RECYCLED CONTENT

Final product	Weight ratio	Pre-consumer	Post-consumer	
Soundproof STC-42 Steel Door	100%	19.0%	29.8%	
Components (with recycled content)	Weight ratio	Pre-consumer	Post-consumer	
Carbon steel 16 GA	58.4%	27.0%	42.0%	
Sonopan panel	9.2%	33.0%	53.0%	
Hinge reinforcements	0.7%	27.0%	42.0%	
Lock reinforcements	0.1%	27.0%	42.0%	
Final product	Weight ratio	Pre-consumer	Post-consumer	
Soundproof STC-44 Steel Door	100%	17.3%	27.0%	
Components (with recycled content)	Weight ratio	Pre-consumer	Post-consumer	
Carbon steel 16 GA	53.7%	27.0%	42.0%	
Carbon steel 18 GA vertical stiffeners	9.7%	27.0%	42.0%	
Hinge reinforcements	0.7%	27.0%	42.0%	
Lock reinforcements	0.1%	27.0%	42.0%	

Validated Eco-Declaration – Sourcing of raw materials

Methodology: on-site audit, supply chain evaluation, analysis and validation of the sourcing data according to the weight ratio of each of the components used in

manufacturing the final product.

Vertima protocol: VERT-032008-02, Second Edition.

SOURCING OF RAW MATERIALS

Weight ratio	Final manufacturing locations
100%	Quebec, Quebec G1N 4L2 and Anjou, Quebec H1J 2G3

Validated Eco-Declaration – Sourcing of raw materials

Methodology: on-site audit, supply chain evaluation, analysis and validation of the sourcing data according to the weight ratio of each of the components used in manufacturing the final product.

Vertima protocol: VERT-032008-02, Second Edition.

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Validated Eco-Declaration: EDV17-1081-05 Period of validity: 02/2019 to 11/2019



SOUNDPROOF STC STEEL DOOR



ATTRIBUTES

SOURCING OF RAW MATERIALS (CONTINUED)

Final product

Soundproof STC-42 Steel Door

Components	Weight ratio	Extraction locations	Transportation
Carbon steel 16 GA	58.4%	Hamilton, Ontario	Truck
Gypsum	31.3%	N/A	N/A
Sonopan panel	9.2%	Louiseville, Quebec	Truck
Hinge reinforcements	0.7%	Hamilton, Ontario	Truck
Adhesive	0.2%	N/A	N/A
Lock reinforcements	0.1%	Hamilton, Ontario	Truck
Paint (for touch-ups)	Negligible	N/A	N/A

The sourcing of raw materials is documented to 48.8% based on the weight of the final assembled product.

Final product

Soundproof STC-44 Steel Door

Components	Weight ratio	Extraction locations	Transportation
Carbon steel 16 GA	53.7%	Hamilton, Ontario	Truck
Anti-vibration liquid	34.3%	N/A	N/A
Carbon steel 18 GA vertical stiffeners	9.7%	Hamilton, Ontario	Truck
Compressed fiberglass	1.5%	N/A	N/A
Hinge reinforcements	0.7%	Hamilton, Ontario	Truck
Lock reinforcements	0.1%	Hamilton, Ontario	Truck
Paint (for touch-ups)	Negligible	N/A	N/A

The sourcing of raw materials is documented to 44.3% based on the weight of the final assembled product.

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SOUNDPROOF STC STEEL DOOR

ATTRIBUTES (CONTINUED)

SOURCING OF RAW MATERIALS (CONTINUED)





1. EXTRACTION LOCATION OF RECYCLED STEEL (Carbon steel 16 GA, carbon steel 18 GA vertical stiffeners, hinge

reinforcements, lock reinforcements)

Canada: Hamilton, Ontario

2. EXTRACTION LOCATION OF RECYCLED WOOD (Sonopan panel)

Canada: Louiseville, Quebec

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Validated Eco-Declaration: EDV17-1081-05 Period of validity: 02/2019 to 11/2019



SOUNDPROOF STC STEEL DOOR



INGREDIENTS AND EMISSIONS

DECLARATION OF CHEMICAL INGREDIENTS



Type of declaration: Health Product Declaration[®] (HPD[®]) version 2.1 **Period of validity:** November 30, 2017 to November 30, 2020

HPD name: Soundproof STC-42 Steel Door

Summary of product contents and results from chemical substances screening against (HPD Priority Lists¹) and the GreenScreen for Safer Chemicals^{®,2}.

HPDC repository URL: http://www.hpd-collaborative.org/hpd-public-repository/ The results presented below are specific to the R-12.9 and R-8.75 Insulated Steel Doors. For the Steel Door with Honeycomb Core and the Steel Door with Temperature Rise Core, please consult the HPDC repository.

Physical hazard

Global warming

□ Ozone depletion

Multiple

🗌 Unknown

The Health Product Declaration® and its logo are used with permission from the Health Product Declaration® Collaborative.

Declaration: Prepared by Vertima Inc., HPDC-approved third party

Content inventory threshold: 1,000 ppm

Full disclosure of intentional ingredients: Yes

Full disclosure of known hazards: Yes

Hazard(s) associated with product ingredients

The HPD standard is a declaration of product content and direct health hazards associated with exposure to its different components. This Declaration is not an assessment of the risks associated with the actual use of the product. It does not address the potential health impacts of the substances used or created during manufacturing that do not appear in the final product as residuals, nor substances created through combustion or other degradation processes.

GreenScreen® score of highest concern: List Translator Likely Benchmark 1³



¹Please refer to Annex D of HPD®Open Standard version 2.1, May 2017: http://www.hpd-collaborative.org

²GreenScreen for Safer Chemicals®: http://www.greenscreenchemicals.org/

³GreenScreen (GS) scores for chemical ingredients: Benchmark 1 (Avoid, chemical of high concern), Benchmark 2 (Use but search for safer substitutes), Benchmark 3 (Use but still opportunity for improvement), Benchmark 4 (Prefer, safer chemical).

TABLE OF INGREDIENTS

Name	Role	Weight ratio	CAS ¹	GreenScreen ^{®2}	Note(s) (for more information, please refer to the HPD®)
Carbon steel 16 GA (Galvannealed Steel #1)	Main component	58.4%	7440-02-0, 7439-92-1 7440-43-9	LT-1	LT-P1 score also present
Gypsum	Fire resistance	31.3%	13397-24-5 65997-17-3	LT-UNK	-
Soundproofing Panel	Sound Insulation	9.2%	26062-79-3 2437-29-8	LT-P1	LT-UNK score also present
Hinge Reinforcements, Lock Reinforcements	Hardware reinforcement	0.8%	7440-02-0, 7439-92-1 7440-43-9	LT-1	LT-P1 score also present
Adhesive (Adhesive #1)	Assembly	0.3%	Undisclosed (2)	LT-UNK	-
Paint	Finish	0%	13463-67-7	LT-1	LT-UNK score also present

¹Only the CAS numbers with the score of highest concern are listed. The complete list of substances can be found in the HPD®.

²GS List Translator (LT) scores for chemical ingredients: LT-1, equivalent to GS Benchmark 1; LT-P1, possible equivalent of GS Benchmark 1; LT-U or LT-UNK, present on official lists but there is insufficient information to classify the hazards as LT-1 or LT-P1 (does not mean the chemical is safe).

Validated Eco-Declaration – Declaration of chemical ingredients

Methodology: validation of the documentation confirming the methodology and reporting of chemical ingredients.

Vertima protocol: VERT-032009–01, Second Edition.

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SOUNDPROOF STC STEEL DOOR



INGREDIENTS AND EMISSIONS

VOLATILE ORGANIC COMPOUNDS (VOCs)

Paint, adhesive and anti-vibration liquid are applied during the manufacturing of the Soundproof STC Steel Door. For the product category presented below, the value refers to the VOC content of the paint in its liquid state.

PRODUCT					
Manufacturer	Product	VOC content			
MICCA	Paint (for touch-ups)	83 g/L			
Adchem / Adfast	Adhesive ¹	127 g/L			
Blachford	Anti-vibration liquid ²	37 g/L			

¹Adhesive is used only in the Soundproof STC-42 Steel Door. ²Anti-vibration liquid is used only in theSoundproof STC-44 Steel Door.

Validated Eco-Declaration – Volatile organic compound (VOC) emissions Methodology: validation of documents attesting VOC emissions. Vertima validation protocol: VERT-032009-02, Second Edition.

TECHNICAL PERFORMANCES

PERFORMANCE TESTS

Non-exhaustive list. Please consult the documentation for the Soundproof STC Steel Door for more information.

Compliance with steel standards: ASTM A 653 / A 653M

Compliance with acoustic standards

Among its range of products, Métalec manufactures a soundproofed steel door assembly with all the following ASTM acoustic requirements:

ASTM E 336 Standard Test Method for Measurement of Airborne Sound Insulation in Building;

ASTM E413 Standard Classification for Determination of Sound Transmission Class (STC);

ASTM C423 Sound Absorption and Sound Absorption Coefficients by the Reverberation Room Method;

To meet the specified acoustic rating level, solely sound cutters provided by Métalec are permitted.

Fire resistance testing: CSDMA, NAAMM, CAN/ULC-S104-M80, UL10 (b), NFPA252, NFPA80, ASTM E 152.

WARRANTY

Métalec Steel Doors and Frames guarantees its products for a five-year period, starting from the delivery date, against all manufacturing defects (if products are properly installed).

Métalec Steel Doors and Frames will repair or replace all products that are deemed to be defective, following an inspection by one of its representatives, if the representative has determined that there is a manufacturing defect.

Métalec is solely responsible for the product delivered to its client's warehouse. This warranty does not include:

installation, paint application and other fees that the client or user may have incurred. Note that the deflection of a steel door caused by exposure to sunlight is not considered a manufacturing defect but rather as a natural and uncontrollable physical reaction; in this case, the warranty does not apply. Certain restrictions apply.

Source: www.metalec.com

ENVIRONMENTAL COMMITMENT

MANUFACTURER'S ENVIRONMENTAL MANAGEMENT

Métalec Steel Doors and Frames aims to make a positive contribution to the world and reduce its environmental footprint in all of the actions it undertakes. The company is committed to showing leadership, rigor and determination in its pursuit of environmentally conscious actions to advance sustainable development among its clients and the public.

Métalec's environmental commitment goes beyond the manufacturing of products that are respectful of the environment and in conformity with LEED requirements. We also aim to integrate sustainable practices in our factories and processes.

Page 6

Source: www.metalec.com

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SOUNDPROOF STC STEEL DOOR



SUMMARY OF PRODUCT CONTRIBUTIONS

LEED® v4 for Building Design and Construction (BD+C)

New Constructions, Core and Shell, Schools, Retail, Data Centers, Warehouses and Distribution Centers, Hospitality and Health Care Establishments.

LEED® v4 for Interior Design and Construction (ID+C)

Commercial Interiors, Retail and Hospitality.

MATER	IALS AND RESOURCES	PRODUCT CONTRIBUTIONS			
			ATTRIBUTES		
MR	 Building Product Disclosure and Optimization Sourcing of Raw Materials Option 2: Best extraction practices (1 point) The Soundproof STC Steel Door may also contribute to the location valuation factor if the product is sourced (extracted, manufactured, purchased) within a 160-km radius of the project site. 	Contribute	Recycled content - Variable depending on product : Soundproof STC-42 Steel Door: Pre-consumer (19.0%) Post-consumer (29.8%) Soundproof STC-44 Steel Door: Pre-consumer (17.3%)		
	Building Product Disclosure and Optimization		INGREDIENTS AND EMISSIONS		
MR	- Material Ingredients Option 1: Materials Ingredients Reporting (1 point) The Soundproof STC Steel Door contributes with its Health Product Declaration® and is valued as 1 whole product out of the 20 needed for credit achievement calculation purposes.	Contribute	HPD® version 2.1 Health Product Declaration®		
INTERIOR ENVIRONMENTAL QUALITY		PI	RODUCT CONTRIBUTIONS		
IEQ	Low-Emitting Products Option 1: Product category calculation (1-3 points) The number of points depends on the LEED® rating system chosen and the number of compliance categories.		INGREDIENTS AND EMISSIONS		
		Do not contribute ¹	¹ Must be tested and determined compliant with the California Department of Public Health (CDPH) Standard Method v1.2-2017.		

Note that the total number of possible points indicates the number of achievable points in each credit category where the specific product may contribute. The product itself cannot achieve this score, as defined above, but is considered as a beneficial element in all building components used in order to achieve LEED®credits.

Soundproof STC Steel Doors help optimize a building's acoustic performance.

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